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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/586,178	06/01/2000	Ilya Umansky	Cisco-34US	5809

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EXAMINER

RAHIMI, IRAJ A

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/586,178

Applicant(s)

UMANSKY ET AL.

Examiner

(Iraj) Alan Rahimi

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on June 28, 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-5 and 7-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 28 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. In papers filed on June 28, 2004, applicant amended claims 1, 7, 16 and 18 as well as canceling claim 6. Applicant's response to 112 rejection was reviewed and accepted. 112 rejection is now removed. Newly submitted drawings were also found acceptable.

### ***Response to Arguments***

2. Applicant's arguments filed on February 2, 2004 have been fully considered but they are not persuasive.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US patent 5,881,064) in view of Bloomfield (US patent 6,693,729) and further in view of Crager et al. (US patent 4,058,838).

Regarding claim 1, Lin discloses a fax communication system for communicating fax information between a first fax machine 12 having error correction capability and a second fax

machine 20, the first and second fax machines being coupled to communicate with one another across a packet switching network 10, comprising:

a network device 31 coupled to receive fax information from the first fax machine 12, said network device including an accumulation block (packet buffer 53) for accumulating a portion of the fax information in the form of at least one frame for stalling the second fax machine 20 while accumulating said portion until said portion is determined to be free of error, said portion being sent to the second fax machine free of errors across the packet switching network to the second fax machine (column 6, lines 44-56 and column 7, lines 18-37).

Although Lin discloses stalling the fax machine 20 by sending fill codes till the transmission errors are corrected by retransmission, he does not disclose that Node 31 accumulating the error free data prior to transmission to fax 20. Bloomfield discloses in column 18, lines 5-35 that fax interface device 102 performs check sum indicating presence of error or not. If the check sum is not OK, fax server sends "Error Ack" signal to the fax interface device for resending the data. This process is repeated till error free data is received.

Although Bloomfield teaches using check sum method for indication presence of error, he does not disclose using Cyclic Redundancy Code (CRC) method. Crager discloses use of CRC in column 43, lines 42-51.

Lin and Bloomfield and Crager are combinable because they are from the same field of endeavor that is facsimile communication in a network environment. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to combine the Bloomfield and Crager inventions with Lin.

The motivation for doing would have been to ensure data transmitted from the fax machine reaches the destination error free.

Therefore, it would have been obvious to a person skilled in the art, at the time of invention to combine the Bloomfield and Crager inventions with Lin to obtain the invention as specified.

Regarding claim 2, Lin discloses a system as recited in claim 1 wherein the fax information is transmitted between the first fax machine and the second fax machine in real-time (column 2, lines 53-67).

Regarding claim 3, Lin discloses a system as recited in claim 1 wherein the stalling signal is in the form of a fax cover page. As thought by Lin, dummy codes are inserted to stall the receiving fax machine till corrected data is transmitted. These dummy codes can take various shapes and an obvious one is a cover page.

Regarding claim 4, Lin discloses a system as recited in claim 1 wherein the stalling signal is a nonfunctional command (column 7, lines 6-17).

Regarding claim 5, Lin discloses a system as recited in claim 1 wherein the stalling signal is invalid data (column 7, lines 6-17).

Regarding claim 6, Lin discloses a system as recited in claim 1 wherein the network device further for the fax information in the form of packets (column 5, lines 7-10).

Regarding claim 7, Lin discloses a system as recited in claim 1 wherein the fax information includes fax pages with each page comprising one or more blocks having one or more frames and further wherein said network device for accumulating one or more frames of a block, within the accumulation block (packet buffer 53) as said accumulated portion of fax information (column 6, lines 44-56).

Regarding claim 8, Bloomfield discloses a system as recited in claim 1 wherein the network device is a router (column 4, lines 53-63).

Regarding claim 9, Bloomfield discloses a system as recited in claim 1 wherein the network device further for detecting errors in the accumulated portion of the fax information, for retransmitting said accumulated portion back to the first fax machine, for receiving said accumulated portion, error-free, and for transmitting said error-free portion through the packet switching network to the second fax machine thereby minimizing retransmissions of said portion or any sub-portion thereof of said fax information through the packet switching network to avoid an avalanche effect (column 18, lines 5-35).

Art Unit: 2622

Regarding claim 10, Lin discloses a system as recited in claim 1 wherein said network device further includes a digital signal processor 50 for modulating/demodulating the fax information (column 5, lines 22-24).

Regarding claim 11, Lin discloses a system as recited in claim 10 wherein said network device further includes a central processing unit (CPU 65), coupled to the digital signal processor 50, for accumulating the fax information and for forming from the fax information (column 5, lines 22-24).

Regarding claim 12, Lin discloses a system as recited in claim 11 wherein said network device further includes a memory (packet buffer 53) coupled to the central processing unit for storing the fax information and software means for reading the stored fax information and for transmitting the fax information through the packet switching network.

Regarding claim 13, Bloomfield discloses a system as recited in claim 1 wherein said network device is responsive to the fax information received from the first fax machine through an interface defined by the TCP/IP protocol (column 4, lines 53-63).

Regarding claim 14, Lin discloses a system as recited in claim 1 wherein said network device is coupled to the first fax machine through a public switching telephone network (column 10, lines 46-54).

Art Unit: 2622

Regarding claim 15, Lin discloses a system as recited in claim 1 wherein said network device is coupled, through the packet switching network 10 , to a receiving network device 35, coupled to the second fax machine 20, the receiving network device for transmitting the fax information to the second fax machine and upon detection of errors within the fax information, for receiving a retransmission of the fax information from the second fax machine and repeating retransmissions until the fax information is transmitted, error free, to the second fax machine. Refer to argument in claim 1 please.

Regarding claim 16 and 18, arguments analogous to those presented for claim 1, are applicable.

Regarding claim 17, arguments analogous to those presented for claim 9, are applicable.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37



Art Unit: 2622


CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Iraj) Alan Rahimi whose telephone number is 703-306-3473. The examiner can normally be reached on Mon.-Fri. 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 703-305-4712. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

  
Alan Rahimi  
October 4, 2004

  
EDWARD COLES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER